U.S. Fish & Wildlife Service

Sonny Bono Salton Sea

National Wildlife Refuge

 $\overline{Wildlife\ List}$



Introduction

Established as a national refuge in 1930 by a Presidential Proclamation, the Sonny Bono Salton Sea National Wildlife Refuge is a haven for a diverse range of wildlife. Most of the refuge's 37,600 acres are now inundated due to flooding by the Salton Sea. 1785 acres of agricultural fields and freshwater marsh remain manageable.

Located 228 feet below sea level, the Salton Sea is one of the lowest places in the United States. The area was created in 1905, when a diversion structure on the Colorado River failed, and the river flowed into the Salton Sink for 16 months. Today, the waters of the Salton Sea have stabilized.

An egret chick and egg in their nest.

Enjoying the Refuge's Wildlife

The study of wild animals in their natural habitat has become an increasingly popular pastime for many people. Viewing of wildlife can be greatly enhanced by a pair of binoculars or a spotting scope. This equipment allows the wildlife to be viewed at a distance, thus minimizing disturbance. Also, a good wildlife/birding guide is helpful in locating and identifying the various species.

Common egrets in the bulrush. ©D.B. Marshall/USFWS

refuge in the west.

The Sonny Bono

Salton Sea National

 $Wildlife\ Refuge\ \overline{holds}$

the distinction of having

the most diverse array

of bird species found on

any national wildlife

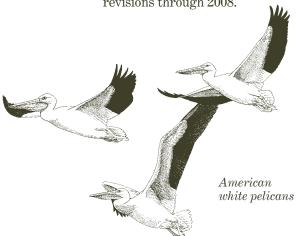




Numbers and species of birds you will see here vary according to season. Heavy migrations of waterfowl, marsh birds, and shorebirds occur during spring and fall. Throughout the mild winter and spring a wide variety of songbirds and birds of prey are present. They are attracted to the freshwater marshes and riparian habitat along the New and Alamo Rivers. The greatest number of species is present from October to May.

When looking at a bird, pay close attention to characteristics such as color, size, shape, wing, and head markings. Always observe first and then refer to your identification book because the bird may move out of sight quickly. This is especially true of perching birds.

The following list of birds contains 424 species that have been recorded at or near the Salton Sea National Wildlife Refuge(NWR). The common name and taxonomic order used in this list follow those appearing in the American Ornithologists' Union Check List of North American Birds, published in 1998, and subsequent revisions through 2008.



Sonny Bono Salton Sea NWR List Key

Wildlife species in this brochure have been grouped into five categories: birds, mammals, reptiles, amphibians, and fish.

Seasons

- Sp Spring, April through May
- S Summer, June through August
- F Fall, September through October
- W Winter, November through March

Spring – Some species migrate much earlier than others, appearing in the Salton Sea area during March, but are nonetheless considered spring migrants rather than winter visitors. Their status at this time of the year is indicated under Spring rather than Winter.

Summer – Status specified under this heading indicates the relative abundance of summering birds. Observers must remember late spring migrants can be found into early June, and that early fall migrants can occur as early as late June, but these are not summering birds. Their status as migrants is indicated under Spring and Fall rather than Summer.

Fall – Since some species, particularly shorebirds, migrate quite early in the fall, their status as fall migrants in July and August is indicated under Fall rather than Summer.

Winter – As indicated above, some early spring migrants may be present during March or earlier, as with swallows. Likewise, some late fall migrants linger in November. However, these occurrences are omitted from the winter column so as to clearly indicate the status of each species as a winter visitor.

Season Abundance Codes

- a abundant, found in large numbers.
- c common to abundant, easily found in suitable habitat.
- u uncommon to fairly common, found when looked for in suitable habitat, but can be missed.
- r rare to very uncommon, more often missed than seen, even when looked for in suitable habitat.
- o occasional, normally less than five individuals per season during any given year, but to be looked for.
- 1-9 number of records is less than ten records for the entire area, and not to be expected.

Habitat Codes

- o open water restricted to the open water of the Salton Sea.
- b beach and mudflat the shore line of the Salton Sea and other areas of shallow water and mud, including flooded fields.
- m marshes cattail marshes and marshy areas along rivers and canals, and shallow lakes.
- f farmland agricultural land found extensively throughout the Imperial Valley south of the Salton Sea; includes both planted and unplanted fields.
- s shrubland mesquite thickets and other brushy areas. Some shrubland contains scattered trees.
- r riparian vegetation areas of salt cedar and willows along waterways, and at some points along the shore of the Salton Sea.
- a aerial strong flying species most often seen in the air.

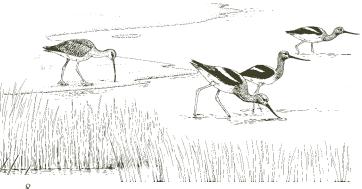
Habitat Codes	
continued	

- houses and towns - immediate vicinity of ranch houses and the residential areas of towns and urban spaces. Here large trees and ornamental planting support a variety of landbirds.

Codes Listed Under Notes

Listed in the notes (N) column is information over and above the relative abundance shown for each season and it clarifies the status of some species in the area.

- b species regularly breeds in the
- b +- species has bred in the area, and may continue to breed sporadically in the area, but is not expected to become a regularly nesting species.
- 1 species occurs only locally within the area.
- e an erratic species, occurring in numbers some years, but very scarce or even absent in others.
- species formerly occurred in the area, but is now extirpated, occurring only as an accidental straggler if at all.
- xb an extirpated breeder formerly nesting in the area, but with no recent breeding records.
- p a post-breeding visitor to the area from the south, most numerous in the area between July and September.
- Federally Endangered or **Threatened Species**



Rirds of Conny Rono Salton Sea NWR

Birds of So	onny Bo	no S	alto	n Se	a N	WR
Common Name	н	Sp	S	F	W	N
Geese, Swans and Ducks						
Black-bellied Whistling-Duck	m	0	0	0		
Fulvous Whistling-Duck	m	0	0			xb
Greater White-fronted Goose	fm	0	3	u	u	210
Snow Goose	fom	r	0	c	a	
Ross's Goose	fom	r	0	c	a	
Cackling Goose	fom	•		0	0	
Canada Goose	fom	0	0	u	u	
Brant	om	r	r	0		
Tundra Swan	om	_	_		0	
Wood Duck	m	2	1		0	
Gadwall	mo	u	u	u	u	b+
Eurasian Wigeon	mo			0	0	
American Wigeon	mo	r	0	c	c	
American Black Duck					1	
Mallard	mfo	u	u	u	u	b
Blue-winged Teal	mo	r	0	u	u	
Cinnamon Teal	mfo	c	u	c	u	b
Northern Shoveler	bmo	c	r	a	a	
Northern Pintail	mo	u	0	c	c	
Baikal Teal					1	
Green-winged Teal	mo	u	0	c	c	
Canvasback	0	0	0	0	u	
Redhead	mo	u	u	u	u	b
Ring-necked Duck	mo	0	0	r	r	
Tufted Duck					1	
Greater Scaup	O	0	0		u	
Lesser Scaup	0	0	0	u	c	
Surf Scoter	O	r	0	0	0	
White-winged Scoter	O	0	0		0	
Black Scoter		2	7			0
Long-tailed Duck	O	0	2			0
Bufflehead	O	0	0		u	b+
Common Goldeneye	O	0	0		u	
Barrow's Goldeneye					7	
Hooded Merganser	mo	1	1		r	
Common Merganser	0	0	7		0	
Red-breasted Merganser	0	r	0	r	0	
Ruddy Duck	om	c	u	c	a	b
Pheasants						
Ring-necked Pheasant	f	u	u	u	u	b
						9

Common Name	Н	Sp	S	F	W	N
New World Quail						
Gambel's Quail	S	c	c	c	c	b
Loons						
		4		0	4	
Red-throated Loon Pacific Loon		4		3	4	
Common Loon	0	\mathbf{r}		o r	1 4	
Common Loon	0	Г		Г	4	
Grebes						
Least Grebe					1	
Pied-billed Grebe	mo	c	c	c	c	b
Horned Grebe	0	O	5	O	0	
Red-necked Grebe				1		
Eared Grebe	om	c	u	c	c	b+
Western Grebe	om	u	u	u		b
Clark's Grebe	om	u	u	u	u	b
Albatrosses						
		9	1			
Laysan Albatross		3	1			
Petrels and Shearwaters						
Cook's Petrel			3			
Wedge-tailed Shearwater			1			
Buller's Shearwater			1			
Sooty Shearwater		1	7			
Storm-Petrels						
Leach's Storm-Petrel			1	1		
Black Storm-Petrel			1	3		
Least Storm-Petrel			1	2		
Least Storm-Tetrer			1	4		
Boobies						
Blue-footed Booby	0			O	3	ер
Brown Booby	0			O	1	ер
Pelicans						
American White Pelican	oa	a	u	a	c	xb
Brown Pelican*						b+
Drown renean	0	u	u	a	С	UT
Cormorants						
Brandt's Cormorant		1				
Neotropic Cormorant		3	4	2	1	
Double-crested Cormorant	0	a	a	a	a	b
Darters						
		4			4	
Anhinga		1			1	
Frigatebirds						
Magnificent Frigatebird	a		0	0	1	ер
10			Ĭ	Ü	1	P
,						

Common Name	Н	Sp	S	F	W	N
Rails, Gallinules and Coots						
Black Rail	m	0	0	0	0	b
Clapper Rail*	m	u	u	u	u	b
Virginia Rail	m	u	r	u	u	b
Sora	m	u		c	c	
Common Moorhen	m	u	u	u	u	b
American Coot	mo	a	c	a	a	b
Cranes						
Sandhill Crane	fm			c	c	
	1111			C	C	
Plovers	1.0					
Black-bellied Plover	bf	c	r	c	С	
American Golden-Plover	fb	0		0		
Pacific Golden-Plover	fb	0		О	0	
Snowy Plover	b	u	u	u	u	b
Wilson's Plover			1			xb
Semipalmated Plover	b	c		c	u	
Piping Plover*				1		
Killdeer	fb	c	c	c	c	b
Mountain Plover	f			u	u	
Eurasian Dotterel					1	
Oystercatchers						
American Oystercatcher			1			
			_			
Stilts and Avocets	1 C					1
Black-necked Stilt	bmf		a	a	a	b
American Avocet	bm	a	c	a	a	b
Sandpipers and Phalaropes						
Spotted Sandpiper	b	u		u	u	
Solitary Sandpiper	m	0		r	3	
Wandering Tattler	b	0		0	0	
Spotted Redshank		1				
Greater Yellowlegs	bmf	c	0	c	c	
Willet	b	c	r	c	c	
Lesser Yellowlegs	bmf	u		c	u	
Whimbrel	fb	c	0	c	8	
Long-billed Curlew	fb	c	u	c	a	
Hudsonian Godwit		1		1		
Marbled Godwit	b	c	u	c	c	
Ruddy Turnstone	b	r	3	0	0	
Black Turnstone	b	0	2	0	3	
Surfbird	b	1	_	0		
Red Knot	b	u	0	r	0	
Sanderling	b	u		r	0	
Semipalmated Sandpiper	b	r		0		
	h	ล		ี	- 11	
Western Sandpiper Little Stint	b	a 1		a	u	

Eurasian Collared-Dove	Common Name	Н	Sp	S	F	w	N	Common Name	Н	Sp	S	F	W	N
Broad-billed Hummingbird	Gulls, Terns and Skuas continued							Humminghirds						
Elegant Term	Royal Torn			1						1				
Black Skimmer		ho	0						h		u]
Pomarine Jaeger					c	4	h					u	u	
Parasitic Jaeger							D							
Auks, Murrelets and Puffins											O.	-	-	
Auks, Murrelets and Puffins				U		1						r		
Ancient Murrelet			Ü		Ŭ									
Pigeons and Doves Rock Dove A			1	2				Kingfishers						
Rock Dove	Pigeons and Doves							•	bmr	u		c	c	
Band-tailed Pigeon		h	c	c	c	c	b	Woodpeckers						
Eurasian Collared-Dove							,-		h	0		0	0	е
Spotted Dove		h		c			b				1			
White-winged Dove			Ü									4	3	
Mourning Dove		hsf	c		r				h	u				b
Inca Dove													1	
Common Ground-Dove												1		
Ruddy Ground-Dove h o o o b b Red-breasted Sapsucker hr Ladder-backed Woodpecker sh u u u u b Say's Phoebe from Sare-whet Owl Short-eared Owl from Saw-whet Owl Short-eared Owl Short-eared Owl Short-eared Owl from Saw-whet Owl Short-eared Owl so o o o b Say's Phoebe from Say's Phoebe from Saw-whet Owl Short-eared Swift a u u u u w b Say's Swift a u u u w w b Say's Swift a u u u w w b Say's Swift a u u u w w w b Say's Kingbird hf o o o o w Western Kingbird hf o o c c w Western Casasin's Kingbird hf o o o o w Western Kingbird hf o c c c c b Western Casasin's Kingbird hf o o o w Western Kingbird hf o c c c c b w Western Kingbird hf o c c c c b w Western Kingbird hf o c c c c b w Western Kingbird hf o c c c c c b w Western Kingbird hf o c c c c b w Western Kingbird hf o c c c c c b w Western Kingbird hf o c c c c c c c c c c c c c c c c c c								1	hr	r			r	
Cuckoos, Roadrunners and Anis Yellow-billed Cuckoo r o o Greater Roadrunner fs u u u u u b Greater Roadrunner fs u u u u u b Groove-billed Ani Barn Owls Barn Owl hf u u u u u b Barn Owl hf vestern Wood-Pewee Western Wood-Pewee Nruttall's Woodpekter Northern Flicker Least Flycatcher The c u Willow Flycatcher The c u u Thammond's Flycatcher Sh r o o Dusky Flycatcher Sh r o o Dusky Flycatcher The c c c c c Dusky Flycatcher The c c c c													0	
Yellow-billed Cuckoo r o o Greater Roadrunner fs u u u u u b Greater Roadrunner fs u u u u u b Greater Roadrunner fs u u u u u b Greater Roadrunner fs u u u u u b Groove-billed Ani Tyrant Flycatchers Barn Owls Barn Owl hf u u u u b Greater Pewee Western Wood-Pewee hrs c u Yellow-bellied Flycatcher hrs c o Vermilion Flycatcher hrs c c c c b Gray Flycatcher hrs c c c c b Gray Flycatcher hrs c c c c b Gray Flycatcher hrs c c c c c b Gray Flycatcher hrs c c c c b Goatsuckers Eastern Phoebe hrs c c c c b Say's Phoebe fu c c c c c b Say's Phoebe hrs c c c c b Vermilion Flycatcher hrs c c c c b Vermilion Flycatcher hrs c c c c b Dusky-capped Flycatcher hrs c c c c b Dusky-capped Flycatcher hrs c c c c b Goatsuckers Swifts Black Swift a u u W Withe-throated Swift a u u W Western Kingbird hf o c c c western Kingbird hrs c c c woll western Kingbird hrs c c c woll western Kingbird hrs c c c woll western Kingbird hrs c c c woll western Kingbird	· ·		_				_,			u	u	u	u	k
Greater Roadrunner Grove-billed Ani Barn Owls Barn Owl B														
Groove-billed Ani Barn Owls Barn Owl hf u u u u u b Greater Pewee Barn Owl hf u u u u u b Western Wood-Pewee hrs c u Yellow-bellied Flycatcher Flamulated Owl hf r r r r r b Flb Willow Flycatcher Great Horned Owl hf r r r r r b Least Flycatcher Burrowing Owl f c c c c b Gray Flycatcher Burrowing Owl f o r r r Pacific-slope Flycatcher Northern Saw-whet Owl f o b Say's Phoebe Goatsuckers Lesser Nighthawk afs c c u o b Say's Phoebe Common Poorwill s o o Vermilion Flycatcher Black Swift Swifts Barn Owl I u u u u b b Greater Pewee Western Wood-Pewee hrs c u T Alder Flycatcher Flycatcher I Hammond's Flycatcher Fr h u r r r b U r Pacific-slope Flycatcher Fr h u r r r Pacific-slope Flycatcher Fr h c c c c b Gray Flycatcher Flycatcher Fr h c u 1 Black Phoebe Fr h c c c c c b Say's Phoebe Fr h c c c c c b Say's Phoebe Fr h c c c c c b Say's Phoebe Fr h c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c b Say's Phoebe Fr h c c c c c c c b Say's Phoebe Fr h c c c c c c c c c c c c c c c c c c						,,	h		hs	c			c	
Barn Owls Barn Owl hf u u u u u b Greater Pewee Western Wood-Pewee hrs c u Yellow-bellied Flycatcher Flamulated Owl Western Screech-Owl h r r r r r lb Willow Flycatcher Great Horned Owl hf r r r r r b Least Flycatcher Burrowing Owl f c c c c c b Gray Flycatcher sh r c u 1 Burrowing Owl f o r r Pacific-slope Flycatcher rsh o Short-eared Owl f o r r Pacific-slope Flycatcher rsh c c c b Goatsuckers Lesser Nighthawk afs c c u o b Say's Phoebe f u o c c c b Vermilion Flycatcher Swifts Swifts Barn Owl hf u u u u u b b Greater Pewee Western Wood-Pewee hrs c u T Hammond's Flycatcher Least Flycatcher Phammond's Flyc		18	u	и		и	Ŋ	Tyrant Flycatchers						
Barn Owl hf u u u u b Greater Pewee Western Wood-Pewee hrs c u Yellow-bellied Flycatcher Flamulated Owl Western Screech-Owl h r r r r r lb Willow Flycatcher Great Horned Owl hf r r r r r b Least Flycatcher Flycatcher Burrowing Owl f c c c c c b Gray Flycatcher Fl					1				hre	7/9		0		
Typical Owls Flamulated Owl Western Screech-Owl Mestern Wood-Pewee Millow Flycatcher Alder Flycatcher Millow Fly									111.5	1				
Typical OwlsYellow-bellied FlycatcherFlamulated Owl1Alder Flycatcher1Western Screech-Owlh r r r r r lbWillow Flycatcherrh c uGreat Horned Owlhf r r r r r bLeast Flycatcherrh u rElf Owl1Hammond's Flycatcherrh u rBurrowing Owlf c c c c bGray Flycatchersh r o oLong-eared Owlr o oDusky Flycatcherrsh o oShort-eared Owlf o r r rPacific-slope Flycatcherrsh c u 1Northern Saw-whet Owl1 1Black Phoebehfm c c c c c bGoatsuckersEastern Phoeberh o o c c bLesser Nighthawkafs c c u o bSay's Phoebef u o c c bCommon Poorwills o o o vermilion Flycatcherh o o r r xWhip-poor-will1Dusky-capped FlycatcherSwifts1Dusky-capped FlycatcherBlack Swift5 1Tropical Kingbird4 2Chimney Swifta u u white-throated Swifta r r uWestern Kingbirdhf o o o o western KingbirdWestern Kingbirdhf a c cTyrant Flycatchers continued next page	Barn Owl	hf	u	u	u	u	b		hre	c				
Flamulated Owl Western Screech-Owl h r r r r r lb Willow Flycatcher rh c u Great Horned Owl hf r r r r r b Least Flycatcher rh u r Burrowing Owl f c c c c c b Gray Flycatcher sh r o o Long-eared Owl r o o Dusky Flycatcher rsh o o Short-eared Owl f o r r r Northern Saw-whet Owl f o r r r Barrowing Owl f o r r r Short-eared Owl f o o o o w Short-eared Owl f o r r r Short-eared Owl f o o o o w Short-eared Owl f o r r r Short-eared Owl f o o o o w Short-eared Owl f o o o o o w Short-eared Owl f o o o o o w Short-eared Owl f o o o o o w Short-eared Owl f o o o o o w Short-eared Owl f o o o o o o o o o o o o o o o o o o	Typical Owls								111.5	C				
Western Screech-Owl h r r r r lb Willow Flycatcher rh c u Elf Owl Least Flycatcher I Least Flycatcher I Least Flycatcher rh u r Burrowing Owl f c c c c c b Gray Flycatcher sh r o o o Long-eared Owl r o o o Dusky Flycatcher rsh o o Short-eared Owl f o r r r Pacific-slope Flycatcher rsh c u 1 Northern Saw-whet Owl I 1 Black Phoebe hfm c c c c c b Goatsuckers Eastern Phoebe rh o o Common Poorwill s o o O Vermilion Flycatcher h o o r r r x Whip-poor-will I Dusky-capped Flycatcher h o o r r x x Whip-poor-will Swift I Dusky-capped Flycatcher Swift I Dusky-capped Flycatcher I Tropical Kingbird Cassin's Kingbird hf o o O O O O O O O O O O O O O O O O O					1									
Great Horned Owl hf r r r r r b Least Flycatcher Elf Owl Burrowing Owl f c c c c c b Gray Flycatcher sh r o o o Long-eared Owl r o o o Dusky Flycatcher rsh o o Short-eared Owl f o r r r Pacific-slope Flycatcher rsh c u 1 Northern Saw-whet Owl 1 1 Black Phoebe hfm c c c c b Goatsuckers Lesser Nighthawk afs c c u o b Say's Phoebe f u o c c b Common Poorwill s o o Vermilion Flycatcher Swifts Black Swift 5 1 Chimney Swift a u u White-throated Swift a r r u Least Flycatcher Hammond's Flycatcher Frh u r r Pacific-slope Flycatcher Frh c o o Say's Phoebe f u o c c b Vermilion Flycatcher Ash-throated Flycatcher Fropical Kingbird Cassin's Kingbird hf o o o Western Kingbird hf o o o Tyrant Flycatchers continued next page	Western Screech-Owl	h	r	r	r	r	lb		rh	c				
Elf Owl Burrowing Owl f c c c c c b Gray Flycatcher rh u r Burrowing Owl f c c c c c b Gray Flycatcher sh r o o o Long-eared Owl r o o o Short-eared Owl f o r r r Northern Saw-whet Owl l l l l Northern Saw-whet Owl l l l l Say's Phoebe rh o c c c b Say's Phoebe rh o o r r x xl Whip-poor-will s o o o Vermilion Flycatcher hrs c o u o Whip-poor-will l l l Swifts Black Swift l l l Swift l l l Swift l l l Swift l Swift l l l Swift l Swift l Swift l l l Swift l Sw	Great Horned Owl	hf	r	r	r	r	b	· ·	111	C			1	
Burrowing Owl f c c c c b Gray Flycatcher sh r o o o Short-eared Owl r o o o Dusky Flycatcher rsh o o o Short-eared Owl f o r r r Pacific-slope Flycatcher rsh c u 1 Northern Saw-whet Owl I 1 1 Black Phoebe hfm c c c c b Eastern Phoebe rh o o o Common Poorwill s o o o Vermilion Flycatcher h o o r r r xl Whip-poor-will I Dusky-capped Flycatcher Swift Slack Swift Slack Swift Slack Swift I Tropical Kingbird Cassin's Kingbird hf o o o Western Kingbird hf o o o Western Kingbird hf a c c c I I Trant Flycatcher Swift Swift I I Tropical Kingbird Swift Swift I I Tropical Kingbird I I I Tropical Kingbird I I I Tropical Kingbird I I I I I I I I I I I I I I I I I I I	Elf Owl				1				rh	11			-	
Long-eared Owl f o r r r Pacific-slope Flycatcher rsh o o o Pacific-slope Flycatcher rsh c u 1 Northern Saw-whet Owl 1 1 Black Phoebe hfm c c c c c b Eastern Phoebe rh o o o c c b Say's Phoebe f u o c c b Vermilion Flycatcher h o o r r x xl Whip-poor-will s o o Vermilion Flycatcher hrs c o u o Eastern Phoebe rh o o o r r x xl Whip-poor-will Swifts Swifts Black Swift 5 1 Enswn-crested Flycatcher hrs c o u o Eastern Phoebe rh o o o r r x xl Enswn-crested Flycatcher rhs c o u o Eastern Phoebe rh o o o r r x xl Enswn-crested Flycatcher rhs c o u o Eastern Phoebe rh o o o r r x xl Enswn-crested Flycatcher rhs c o u o o u o Enswn-crested Flycatcher rhs c o u o o u o Enswn-crested Flycatcher rhs c o u o o u o Enswn-crested Flycatcher rhs c o u o o u o u o Enswn-crested Flycatcher rhs c o u o o u o u o o u o o u o u o o u	Burrowing Owl	\mathbf{f}	c	c	c	c	b						0	
Short-eared Owl f o r r Short-eared Owl Northern Saw-whet Owl l l l l l l l l l l l l l l l l l l	Long-eared Owl				O	0								
Northern Saw-whet Owl Goatsuckers Lesser Nighthawk afs c c u o b Common Poorwill Swifts Black Phoebe Eastern Phoebe Th O o Say's Phoebe Fu o c c b Say's Phoebe Fu o c c b Say's Phoebe Fu o c c b Vermilion Flycatcher Ash-throated Flycatcher Black Swift Chimney Swift Vaux's Swift Ash-throated Flycatcher Tropical Kingbird Cassin's Kingbird Cassin's Kingbird Western Kingbird Mestern Kingbird Tyrant Flycatchers continued next page	Short-eared Owl	\mathbf{f}	0		r	r							1	
Goatsuckers Lesser Nighthawk afs c c u o b Say's Phoebe f u o c c b Say's Phoebe f u o c c b Say's Phoebe From the common Poorwill Say's Phoebe From the common Poorwill Say's Phoebe From the common Poorwill Say's Phoebe From the common Poor common Poorwill From the common Poorwill Say's Phoebe From the common Poorwill From the common Poorwill Say's Phoebe From the common Poorwill From the common Poorwill Say's Phoebe From the common Poorwill From the common Poorwill Say's Phoebe From the common Poorwill From the common Poorwill Say's Phoebe From the common Poorwill From the common Poorwill Say's Phoebe From the common Poorwill	Northern Saw-whet Owl				1	1					c			b
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Whip-poor-will Swifts Black Swift Chimney Swift Vaux's Swift a u u White-throated Swift a r r u Dusky-capped Flycatcher Ash-throated Flycatcher Brown-crested Flycatcher Tropical Kingbird Cassin's Kingbird Mestern Kingbird Mestern Kingbird Tyrant Flycatchers continued next page	9						S	•	_					xk
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	14							Tyrant Flycatchers continued next page						18

Common Name H	Sp	S	F	W	N	Common Name	Н	Sp	S	F	
Fyrant Flycatchers continued						Bewick's Wren	rsh			r	
Eastern Kingbird hf	0		0			House Wren	rsh	r		u	
Scissor-tailed Flycatcher	1		1			Winter Wren	r			0	
Shrikes	1		1			Marsh Wren	m	c	c	c	
Loggerhead Shrike sf	0			,,	b	Kinglets					
Northern Shrike si	О	0	u	u 2	Ŋ	Golden-crowned Kinglet	r			0	
				Z		Ruby-crowned Kinglet	$^{\mathrm{rh}}$	u		c	
Vireos						Gnatcatchers					
Bell's Vireo rs			0	О		Blue-gray Gnatcatcher	$_{\rm rs}$	u		u	
Plumbeous Vireo hr			0	0		Black-tailed Gnatcatcher	s	u	u	u	
Cassin's Vireo hr	u		r	1		Thrushes					
Hutton's Vireo			1			Western Bluebird	sh			r	
Varbling Vireo rsh	С		u	2		Mountain Bluebird	f			u	
Red-eyed Vireo			2			Townsend's Solitaire	rh	1		0	
lays and Crows						Swainson's Thrush	rh	u	1	0	
Western Scrub-Jay hrs	3		0	0	е	Hermit Thrush	rh	r	1	r	
Pinyon Jay				2		Rufous-backed Robin	111	1		1	
American Crow hf			0	0	е	American Robin	h	u		u	
Common Raven fa	r	0	u	u	b	Varied Thrush	1	и		4	
arks							-			•	
Horned Lark f	u	u	c	c	b	Mockingbirds and Thrashers		1		1	
Swallows						Gray Catbird Northern Mockingbird	hs	1 c	c	1	
Purple Martin a	0		0			Sage Thrasher	ns sf	r	C	c	
ree Swallow a	c	0	c	c		Brown Thrasher	SI	Γ		0	
Tiolet-green Swallow a	r	U	0	C		Brown Thrasher Bendire's Thrasher				1	
Northern Rough-winged Swallow a	c	c	c	u	b	Curve-billed Thrasher				1	
Bank Swallow a	u		r	r	8	Crissal Thrasher	s	r	r	r	
Cliff Swallow a	c	c	c	_	b	Le Conte's Thrasher	۵	1	1	1	
Cave Swallow	3		1		~						
Barn Swallow a	c	r	a	u	b+	Starlings	1. £				
Chickadees and Titmice						European Starling	hf	c	С	С	
Mountain Chickadee			1	1		Wagtails and Pipits					
Oak Titmouse			•	1		American Pipit	$_{c}^{\mathrm{f}}$	r		c	
Verdins				_		Sprague's Pipit	f	0		0	
Verdin s	c	c	c	c	b	Waxwings	_				
	C	Ċ	C	C	D	Cedar Waxwing	h	r		r	
luthatches						Silky-Flycatchers					
Red-breasted Nuthatch h			r	r	е	Phainopepla	s	u	0	u	
hite-breasted Nuthatch			7	1		Wood-Warblers					
eepers						Blue-winged Warbler				1	
rown Creeper hr			0	0		Tennessee Warbler		3		1	
/rens						Orange-crowned Warbler	rsh	c		c	
actus Wren sh	u	u	u	u	b	Nashville Warbler	$^{\mathrm{rh}}$	c		r	
cock Wren s			r	r		Virginia's Warbler		1		4	
anyon Wren			1								
6						Wood-Warblers continued next page					
6											

Common Name H	Sp	s	F	w	N	Common Name	Н	Sp	S	F	w	N	
Wood-Warblers continued						Lark Sparrow	hf	u	u	u	u	b	
Lucy's Warbler r	0	0	0		b+	Black-throated Sparrow	s			O			
Northern Parula rh	0		0	0		Sage Sparrow	S	\mathbf{r}		r	r		
Yellow Warbler rsł	c		c	0		Lark Bunting	S	O			0		
Chestnut-sided Warbler rh			0	0		Savannah Sparrow							
Magnolia Warbler			5			Savannah Sparrow	\mathbf{f}	c		a	a		
Cape May Warbler			2	2		"Large-billed Sparrow"	b		\mathbf{r}	u	u		
Black-throated Blue Warbler			4			Grasshopper Sparrow	\mathbf{f}	0		O	0		
Yellow-rumped Warbler rsh	c		a	a		Le Conte's Sparrow	1.				1		
Black-throated Gray Warbler rh	c		u	0		Fox Sparrow	rh	0		0	0	h	
Black-throated Green Warbler	1					Song Sparrow Lincoln's Sparrow	rm rs	c u	С	c u	c u	b	
Townsend's Warbler rh	u		r	0		Swamp Sparrow	m	0		0	0		
Hermit Warbler rh	r		0			White-throated Sparrow	hrs	0		0	0		
Blackburnian Warbler			2			Harris's Sparrow	hrs	0		0	0		
Yellow-throated Warbler				1		White-crowned Sparrow	hrs	c		c	c		
Pine Warbler			1			Golden-crowned Sparrow	hrs	0		0	0		
Prairie Warbler			2			Dark-eyed Junco	hrs	\mathbf{r}		r	r		
Palm Warbler r	0		О	0		McCown's Longspur	f				0		
Bay-breasted Warbler	1					Lapland Longspur	\mathbf{f}				r		
Blackpoll Warbler	1					Smith's Longspur	f				2		
Cerulean Warbler			1			Chestnut-collared Longspur	1				r		
Black-and-white Warbler rh	O		O	0		Grosbeaks and Buntings					_		
American Redstart r	O		r	r		Pyrrhuloxia	,	1	1		2		
Prothonotary Warbler			1			Rose-breasted Grosbeak	h	0		0			
Ovenbird	2		3	2		Black-headed Grosbeak Blue Grosbeak	hr	c	0	u	1	b	
Northern Waterthrush r			0	0		Lazuli Bunting	rs rs	u c	u	u u	1	D	
MacGillivray's Warbler rsl	u		r			Indigo Bunting	rs	0		0	1		
Common Yellowthroat rm	c	c	c	c	b	Painted Bunting	10	Ü		4	1		
Hooded Warbler	1					Dickcissel				1			
Wilson's Warbler rsl	c		c	0		Blackbirds and Orioles							
Painted Redstart			2	2		Bobolink		1	1	2			
Yellow-breasted Chat rs	r	r	ľ		b	Red-winged Blackbird	fm	a	a	a	a	b	
Tanagers						Tricolored Blackbird	\mathbf{f}	0		0	0		
Summer Tanager h	0		0	0		Western Meadowlark	\mathbf{f}	c	c	c	c	b	
_	c		u			Yellow-headed Blackbird	mf	u	u	u	u	b	
Emberizids						Brewer's Blackbird	hf	u	u	c	c	b	
C + 11 177 1			70			Common Grackle	1.0	1			1	,	
Green-tailed Towhee s	r		r	0		Great-tailed Grackle	hfm		a	a	a	b	
Spotted Towhee sh Abert's Towhee srl	0		r	r	h	Bronzed Cowbird	h	r	r	0	_	b b	
Abert's Towhee srl American Tree Sparrow	c	С	c	c 5	b	Brown-headed Cowbird Orchard Oriole	fhr	c	c	c 3	$rac{\mathrm{c}}{4}$	b	
*	3.7		17			Hooded Oriole	h	r	r	r	4	b	
Chipping Sparrow sh	u 4		u 2	r 1		Baltimore Oriole	h	0	1	0		N	
Clay-colored Sparrow Brewer's Sparrow s						Bullock's Oriole	hr	c	u	u	0	b	
Brewer's Sparrow s Black-chinned Sparrow	c 3		c 3	С		Scott's Oriole	h			0	0		
Vesper Sparrow sf				17									
vesper sparrow SI	u		u	u									
18												19	

Common Name	Н	Sp	S	F	W	N
Finches						
Purple Finch	hr			0	0	е
Cassin's Finch	hr			0	0	е
House Finch	hs	c	c	c	c	b
Red Crossbill	h			0	0	е
Pine Siskin	rsh	0		ľ	r	е
Lesser Goldfinch	hs	r	r	u	u	b+
Lawrence's Goldfinch	S	r		0	0	е
American Goldfinch	hs	0		r	r	е
Evening Grosbeak				2	1	
Old World Sparrows						
House Sparrow	h	c	С	c	c	b

Mammals of the Refuge



All mammals listed are considered resident species with the exception of the bats, which migrate on a seasonal basis like many of the birds.

Shrews (family Soricidae)

Desert Shrew (Notiosorex crawfordi)
This tiny, long-snouted mammal hunts for insects in woodrat nests and piles of debris at the base of desert plants.

Leaf-nosed Bats

(family Phyllostomatidae) Mostly a tropical group, leaf-nosed bats are distinguished by their large eyes, and leaf-shaped flap on their noses. They are the only bats seen here that hover when feeding.

California Leaf-nosed Bat (Macrotus californicus)
An insect eater, this bat will hover above the ground and then swoop down to seize its prey.

Mexican Long-tongued Bat (Choeronycteris mexicana)
This bat uses its long tongue, tipped with a brush of fleshy projections, to feed on pollen and nectar.

Evening Bats

(family Vespertilionidae) Most North American bats are members of this family, distinguished by small eyes, short tail, and a fleshy projection, or tragus, inside the ear. They typically emerge from their roosts in the evening to feed on flying insects. Most have an erratic flight pattern with many sudden turns.

California Myotis (Myotis californicus)
This small, agile bat can veer suddenly sideways, up, and down.

Western Pipistrel (*Pipistrellus hesperus*) Smallest bat in the U.S., with an 8-inch wingspan. Its flight is weak, erratic, like that of a moth.

Big Brown Bat (Eptesicus fuscus)
Recognizable by its large size (wingspan 12-13 inches), relatively slow wingbeats, and audible chatter.

Hoary Bat

(Lasiurus cinereus)

This large, rare bat (wingspan to 16 inches) is a strong and fast flier. It is a winter migrant to this area and the only bat with white-tipped hairs.

Western Yellow Bat (Lasiurus ega)
A large, rare, yellowish-buff bat that roosts in trees.

Spotted Bat

(Euderma maculatum)
This rare species is the only U.S. bat with white spots. When resting it curls up its long ears.

Pallid Bat

 $(Antrozous\ pallidus)$

The only large, big-eared bat with pale fur. Unique among evening bats, it takes scorpions and large insects from the ground.

Illustration: ©Kendal Morris

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Free-tailed Bats

(family Molossidae) These bats have long, narrow wings; fast, direct flight; and long tails, which extend well beyond the membrane connecting the hind legs. The species are difficult to tell apart, but the Mexican Free-tailed Bat is the most common in our area.

Mexican Free-tailed Bat (Tadarida brasiliensis)

Pocketed Free-tailed Bat (Nyctinomops femorosacca)

 $\begin{array}{c} \text{Big Free-tailed Bat} \\ \textit{(Nyctinomops macrotis)} \end{array}$

vegetation.

below.

Rabbits and Hares

(family Leporidae) Desert Cottontail (Sylvilagus audubonii)
Desert cottontails generally stay close to cover, but will use burrows of other animals in areas of sparse

Squirrels

(family Sciuridae) Round-tailed Ground Squirrel (Spermophilus tereticaudus)
Active in mornings and evenings. It holds its thin tail over its back when running.

Pocket Gophers

(family Geomyidae) Botta's Pocket Gopher (*Thomomys bottae*)
These burrowing rodents have large yellow incisors which are always exposed, since the lips close behind them. They feed on roots, and also cut off stems below ground and then pull the plant into the burrow from



Pocket Mice and Kangaroo Rats

(family Heteromyidae) These rodents have large, fur-lined cheek pouches, and derive all the moisture they need from seeds. Kangaroo rats have long hind legs and a tuft of white hair on the ends of their long tails. Compared to other mice, pocket mice have relatively smaller ears, shorter snouts, and longer hind feet and tails. Both pocket mice and kangaroo rats are strictly nocturnal, and are often seen on roads at night.

Little Pocket Mouse (Perognathus longimembris)

Long-tailed Pocket Mouse (Chaetodipus formosus)

Desert Pocket Mouse (Chaetodipus penicillatus)

Spiny Pocket Mouse (Chaetodipus spinatus)

Desert Kangaroo Rat (Dipodomys deserti)

Merriam's Kangaroo Rat (Dipodomys merriami)

New World Rats and Mice

(family Cricetidae) Cactus Mouse

(Peromyscus eremicus)
Pale gray with large ears; nests in clumps of cactus, rock piles, and abandoned burrows.

Deer Mouse (Peromyscus maniculatus) Grayish-brown above, white below, with large ears and eyes.

Hispid Cotton Rat (Sigmodon hispidus)
Common in agricultural fields and moist habitats. They have coarse, long fur that nearly hides their ears.

New World Rats and Mice continued next page

Opposite: Baby desert cottontails huddle together in the protection of their soft grass and fur-lined nest.

New World Rats and Mice continued White-throated Woodrat (Neotoma albigula)
With their large ears and eyes and silky fur, woodrats resemble overgrown deer mice. Nicknamed "packrats," they carry various objects into their burrows, which are hidden under large piles of sticks, cactus parts, and other debris.

Desert Woodrat (Neotoma lepida)
The two species are similar, but the Desert Woodrat is paler in color.

Muskrat (Ondatra zibethicus)
Muskrats build lodges of mud and marsh plants in freshwater wetlands.
Webbed hind feet and flattened tails make them excellent swimmers

Old World Rats and Mice

(family Muridae)

Black Rat (Rattus rattus)

Omnivorous, but partial to grain, this rat is an excellent climber. Nests are sometimes made in tangled vines and trees.

Norway Rat (Rattus norvegicus)
Larger and more aggressive than the Black Rat. Females may bear up to 12 litters per year of 2 to 22 young.

House Mouse (Mus musculus)
It makes its own nest but lives in groups, sharing escape holes and eating areas.

An unusual daytime sighting of the desert kit fox. (Photo: Joe Engler/ USFWS)





A coyote wanders the wetlands.

Wolves, Foxes and the Coyote (family Canidae)

Coyote (Canis latrans)

Distinctive howls help coyotes track each others' location and reunite members of a band. Doglike droppings full of hair are clues to their presence.

Desert Kit Fox (Vulpes macrotis)
This pale, large-eared fox is a solitary nocturnal predator.

Raccoon, Ringtail and Coati

(family Procyonidae) Raccoon (*Procyon lotor*)
The raccoon is a solitary, nocturnal opportunist, common in wetland

areas and near human habitation.

Weasels, Skunks, Badgers, Otters, and Allies (family Mustelidae)

Badger (Taxidea taxus)

A powerful digger, this animal feasts mainly on small mammals.

Western Spotted Skunk (Spilogale gracilis)
Faster and more agile than the larger skunks, it also is a good climber.

Striped Skunk (Mephitis mephitis)
The only serious predator of this skunk is the Great Horned Owl.

Amphibians, Reptiles, and Fish

Amphibians



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The name amphibian means "double life" and refers to the fact that most amphibians spend part of the year on land but return to water to breed. It also reflects the change of an aquatic tadpole to a terrestrial adult frog or toad. In the spring and early summer, look for them gathering in shallow ponds where they mate and lay eggs.

Frogs and Toads

Woodhouse Toad Red-spotted Toad Bullfrog

Reptiles

Reptiles are egg laying animals that are protected by scales or horny plates. Most are found in brushy areas on the refuge and surrounding desert habitats. The exception to this is the Spiny Softshell turtle, which is found near water.

Turtles

Spiny Softshell

Lizards

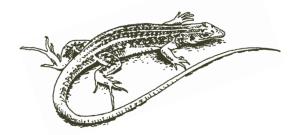
Long-nosed Leopard Lizard Desert Spiny Lizard Side-blothed Lizard Long-tailed Lizard Flat-tailed Lizard Western Whiptail

Snakes

Western Blind Snake Coachwhip Western Patch-nosed Snake Glossy Snake Gopher Snake

Common Kingsnake Long-nosed Snake Checkered Garter Snake

Western Diamondback Rattlesnake



Fish



Very few fish can tolerate the high salinity of the Salton Sea. In 1950, attempts were made to introduce several marine fish. These attempts resulted in the largest inland fishery in California. Today, partly due to the increased salinity, only Tilapia exist in the Salton Sea. Freshwater species are found in rivers, canals, and some marsh areas.

Freshwater Fish

Threadfin Shad Carp Red Shiner Channel Catfish White Catfish Largemouth Bass Mosquitofish Sailfin Molly Desert Pupfish*

Saltwater Fish

Tilapia



Western diamondback rattlesnake in a defensive posture. Photo: Gary Kramer/USFWS

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U.S. Fish & Wildlife Service http://www.fws.gov

Refuge Information 1 800/344 WILD

This brochure is available in an alternative format upon request.





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U.S. Fish & Wildlife Service

Sonny Bono Salton Sea

National Wildlife Refuge

Wildlife List

